



Deliverable D2.3

# Hackathon support rules

LIFE LATESTadapt (LIFE21-CCA-EE-LIFE LATESTadapt/101074438)

Riga Technical University
Tallinn University of Technology
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# **Document Control Sheet**

Project name: "Developing and demonstrating portfolio of nature-based and smart solutions for improving urban climate resilience in Latvia and Estonia".

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Deliverable: Hackathon support rules

# Classification

This report is:

Draft	
Final	X
Confidential	
Restricted	
Public	X

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Partners Contributed	Tallinn University of Technology, Riga Technical University
Partners involved	

#### **Preamble**

Green stormwater infrastructure including Nature Based Solutions (NBS) support the sustainable management of stormwater runoff and can help mitigate climate-exacerbated flooding and water quality problems in urban areas and receiving water bodies. Key challenges exist in different phases of NBS implementation, including public acceptance, integral planning, efficient operation and risk management and so forth. Key provisions to retaining optimal levels of operation of these solutions are maintenance and monitoring. Being conscious of infiltration rates, hydraulic loading ratios, erosion, retention/detention performance etc. during operation can help maintain the level of service and prolong the years of use of NBS before needing any intervention. For this purpose, novel sensing and data collection solutions are necessary. Furthermore, predictive modelling can crucially support implementation and operation. Integrating novel NBS with existing urban infrastructure for holistic water management solutions using geospatial data and urban planning models will help ensure future-proof cities. Developing tools and resources to raise awareness about the benefits of NBS and engaging citizens in performance monitoring will support public acceptance and an efficient life-cycle of the solutions. Sharing data, resources, and expertise can accelerate the development and implementation of NBS.

There are 2 hackathons organised – LifeHack in Latvia and EcoTech in Estonia in 2024. Below the rules for each hackathon are provided separately.

#### Rules of the hackathon "LifeHack Valmiera 2024".

#### 1. General rules

- 1.1. The transnational hackathon of Nature Based Solutions for climate adaptation and sensing technologies for monitoring NBS performance, "LifeHack 2024" (from now on referred to as the Hackathon), is organised by the RTU, Valmiera municipality in cooperation with the Valmiera City, Riga Technical University, Jelgava University of Life Sciences and Technologies, Vidzeme University of Applied Sciences, Tallinn University of Technology, Tartu University, Estonian University of Life Sciences and other industry professionals.
- 1.2. The hackathon aims to promote interest in smart and nature-based solutions for climate adaptations and develop prototypes for novel approaches for NBS monitoring to enable cost-effective monitoring of a large number of NBSs in cities.
- 1.3. The Rules of the Hackathon (from now on Rules) have been developed to define the rules and evaluation criteria of the Hackathon.
- 1.4. Event contact persons:

Jurijs Kondratenko, Riga Technical University, Jurijs.Kondratenko@rtu.lv

Karlis Skuja, Riga Technical University, karlis.skuja\_1@rtu.lv

1.5. The hackathon is held within and sponsored by the LIFE programme 2021-2027 project LIFE LatEstAdapt "Developing and demonstrating a portfolio of nature-based and smart solutions for improving urban climate resilience in Latvia and Estonia", which is co-funded by the European Union, State Regional Development Agency of the Republic of Latvia and the Ministry of Climate of the Republic of Estonia. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union, CINEA or financiers, respectively. Neither the European Union nor the granting authority can be held responsible for them.

## 2. Hackathon Activities and Publicity

- 2.1. The Hackathon runs from May 13th to May 16th in a virtual environment (online) and with an on-site Demo day on May 17 at Valmiera.
- 2.2. The Hackathon program and related information are on the hackathon website https://lifehackvalmiera.hacktribe.co.
- 2.3. The Hackathon will be held in English.
- 2.4. Participants can access pre-prepared data, educational activities, and Mentor support during the Hackathon.

- 2.5. Participation in the Hackathon is free.
- 2.6. Activities of the Hackathon:
  - 2.6.1. Before the Hackathon, teams will be formed that can submit an idea in one or more categories at the hackathon website.
  - 2.6.2. On the Hackathon's second, third and fourth day, teams develop solutions using data prepared by the Organizers or participants or create new concepts and prototypes.
  - 2.6.3. During the Hackathon, participants are allowed and encouraged to consult with Mentors, taking into account the availability indicated by a Mentor.
  - 2.6.4. On the last day of the Hackathon, the teams prepare and present a project presentation, evaluated by the Hackathon Jury panel (from now on the Jury panel), which determines the three best teams.
  - 2.6.5. Concepts/prototypes developed and presented by the teams and evaluated for prize award may include:
    - 2.6.5.1. Concepts of nature-based solutions for specific urban challenges;
    - 2.6.5.2. Landscaping concepts including nature-based solutions;
    - 2.6.5.3. Concepts of innovative sensor technologies and/or sensor technology platform/setup for data provision and communication on environmental parameters and NBS performance;
    - 2.6.5.4. Other aspects relevant to the challenges presented for the hackathon.
- 2.7. The Hackathon is public, and information about it will be posted on the Hackathon website and the websites of cooperation partners, and social networks such as facebook.com.
- 2.8. The event organisers have the right to publish information about the solutions developed during the Hackathon, with reference to their authors.
- 2.9. Copyright and ownership of the solutions developed during the Hackathon belong to their Authors. Hackathon participants undertake to respect the Copyrights of third parties.
- 2.10. By participating in the Hackathon, participants agree to share images taken by the Organisers, the Partners or its contractors without receiving compensation. Participants agree that the images and footage may be broadcasted, displayed, reproduced, edited, exhibited, used and distributed by the Organisers or partners for promotional purposes. This authorisation includes the use of participants name, image and voice. The participant may opt out of ones image being used by notifying the Organisers at karlis.skuja\_1@rtu.lv.

## 3. Requirements for applicants and application procedure

3.1. The event is for anyone of legal age (at least 18 years old) and interested in the event's theme.

- 3.2. Participants can complete individual application forms until May 12, 2024 at 23:59 online <a href="https://lifehackvalmiera.hacktribe.co">https://lifehackvalmiera.hacktribe.co</a>. The Organisers can change the application deadline by publishing information about it on the Hackathon platform.
- 3.3. By applying for participation in the Hackathon, the applicant and related persons agree to the processing of personal data and confirm that they are familiar with the Rules of the Hackathon.
- 3.4. The event participants must comply with all the epidemiological requirements established in the country at the time of the event if such are determined.
- 3.5. The Event Organizers have the authority to assess and determine whether participants can participate in the hackathon.

## 4. Application of teams and implementation of ideas

- 4.1. Participation in the Hackathon is possible only as part of one team. Team building activities will be organised before the Hackathon and on the first day of the Hackathon.
- 4.2. To provide the hackathon participants with a high-quality work process and the necessary resources, the maximum number of teams in the Hackathon is 10. If more than 10 teams apply for the Hackathon, preference is given to those teams that registered for the Hackathon earlier.
- 4.3. The minimum number of participants in a team is two people. The recommended number of team members is from three to five people.
- 4.4. Teams must be registered by May 13 at 14:00 on the Hackathon website, where the Hackathon Idea/Team Application online form must be completed, and all team members must be registered.
- 4.5. Participants will be provided with master classes on various aspects of NBS design as well as be able to consult local Mentors on specifics of each challenge as well as technical aspects of NBS planning.

## 5. Hackathon prizes

- 5.1. The three best teams of the Hackathon will receive a one-time cash prize for an awarded place (from now on the Prize).
- 5.2. For the team to qualify for the Prize Fund, at least one team representative must attend the opening event of the Hackathon, attend all checkpoints, and present the team's results to the Hackathon jury.
- 5.3. The total Prize fund of the Hackathon is 5000 EUR (five thousand euros), which is awarded in the following order: 2500 EUR to the members of the 1st place winning team, 1500 EUR to the members of the 2nd place winning team, 500 EUR to the members of the 3rd place winning

- team. The remaining 1000 EUR may be awarded as motivation prizes at jury's discretion, with one prize not exceeding 250 EUR.
- 5.4. The prize is paid only to those team members who comply with Article 3.1 of this regulation.
- 5.5. Prizes will be paid to the winners equally to each team member. To receive prize payouts, the participants must provide personal information: name, surname, personal identification number, and bank account.
- 5.6. The prize will be paid out within 25 working days after the announcement of the results.

## 6. Hackathon evaluation Jury panel

- 6.1. The Jury panel consists of the representatives from organisations::
- Valmiera municipality;
- Riga Technical University;
- Tallinn University of Technology;
- Ministry of Environmental Protection and Regional Development of Latvia.
- 6.2. The organisers have the right to invite up to two additional Jury panel members.
- 6.3. The Jury panel has decision-making power if at least 3 representatives participate in the Jury panel. The Jury panel makes decisions by the majority of votes of the members present, voting online and announcing the results live.
- 6.4. The Jury panel evaluates the applicant's compliance with the mentioned requirements of this Rules and decides on awarding the prize to each team of the awarded place.

#### 7. Evaluation

- 7.1. The expected result of the Hackathon is solutions or innovative products which correspond to one or more themes of the Hackathon.
- 7.2. The presentation intended for the Jury panel must be sent by the time indicated on the Hackathon website. Works submitted after the deadline will not be evaluated.
- 7.3. The Jury panel members evaluate the teams individually in a 10-point system, where 1 is the lowest, and 10 is the highest, according to the following criteria:
  - 7.3.1. Suitability of the solution to the theme of the hackathon and application;
  - 7.3.2. Solution prototype and novelty of the idea;
  - 7.3.3. Teamwork and final presentation;
  - 7.3.4. Solution potential and benefit to society;
- 7.4. The Jury panel decides on the winning teams by open voting, with a majority of votes. If the votes are equally divided, the vote of the President of the Jury panel is decisive. The evaluation criteria are described in more detail in Appendix No. 1.

- 7.5. The jury panel can ask the Organizers and Mentors for their opinions about the team's performance. The evaluation of organisers and mentors is only recommendatory.
- 7.6. The Jury panel's decision is final and cannot be appealed.
- 7.7. The Jury panel's decision is recorded and confirmed by the representative of the Organizers.
- 7.8. The organisers publicly announce the results of the Hackathon and inform the members of the winning teams on behalf of the Jury panel about the results and awarding or refusal of the Prize by sending an appropriate e-mail to the e-mail address specified by each team member.

## Organisers contacts:

Organisational and technical matters: Karlis Skuja, Riga Technical University, karlis.skuja\_1@rtu.lv Information on challenges: Jurijs Kondratenko, Riga Technical University, Jurijs.Kondratenko@rtu.lv

# Appendix 1

Rules for the online hackathon "LifeHack Valmiera 2024".

# **Criteria for evaluating teams:**

Criterion	Evaluations system – scale(1-10) <sup>1</sup>	point
1. Solution compliance with the hackathon theme and application		
- The idea corresponds to the theme and purpose of the hackathon		
- The solution is focused on a specific topic or a universal solution is developed that is adaptable to different contexts		
- The solution has implementation potential in real-life		
2. Solution prototype and novelty of the idea		
- A functional solution or solution prototype has been created		
- Industry-specific data or knowledge is used in the creation of the solution		
- The Idea/Solution is innovative and contains unique /IoT/Sensor features		
3. Teamwork and final presentation		
- The team is motivated and well organised; what was done during the hackathon		
- The team demonstrates good knowledge of the Hackathon topic, as well as listens to the opinions of Mentors and potential users of the solution		
- The team can clearly and convincingly present their idea		
4. Solution potential and benefit to society		
- Evaluation of the viability (investment, maintenance costs, cost effectiveness) of the idea and future perspective		
- Benefit to the city of Valmiera, LIFE LatEst Adapt project partners, industry or society at large		
- The idea has the potential for commercialisation		

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 $<sup>^{1}</sup>$  Each section is evaluated in a 10-point system from 1 to 10 points, where 1 is the lowest rating and 10 is the highest rating.

## Rules of the hackathon " EcoTech 2024"

#### 1. General rules

- 1.1 The transnational EcoTech Hackathon for Making Urban Water Smart (hereinafter "hackathon") is organized by TalTech and Garage48, with support from <a href="LIFE LATESTadapt">LIFE LATESTadapt</a> project consortium.
- 1.2 The hackathon aims to promote interest and knowledge exchange on smart nature-based solutions for climate adaptations and develop prototypes for novel approaches for NBS monitoring and management to enable cost-effective implementation of a large number of NBSs in cities.
- 1.3 The Rules of the Hackathon (hereinafter "rules") have been developed to define the rules and evaluation criteria of the Hackathon.
- 1.4 Event contact persons:

Katrin Kaur, Tallinn University of Technology, <a href="mailto:katrin.kaur@taltech.ee">katrin.kaur@taltech.ee</a>
Mari Hanikat, Garage48, <a href="mailto:mari@garage48.org">mari@garage48.org</a>
Kseniia Karpenkova, Garage48, <a href="mailto:kseniia@garage48.org">kseniia@garage48.org</a>

1.5 The hackathon is held within and sponsored by the LIFE programme 2021-2027 project LIFE LatEstAdapt "Developing and demonstrating a portfolio of nature-based and smart solutions for improving urban climate resilience in Latvia and Estonia", which is co-funded by the European Union, State Regional Development Agency of the Republic of Latvia and the Ministry of Climate of the Republic of Estonia. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union, CINEA or financiers, respectively. Neither the European Union nor the granting authority can be held responsible for them.

## 2. Hackathon Activities and Publicity

- 2.1 The hackathon is held 19.-21. September onsite at TalTech Mektory with the opportunity for some team members to participate in teamwork online, provided the core team is present onsite.
- 2.2 The Hackathon program and related information are on the hackathon website <a href="https://garage48.org/events/ecotechhackathon">https://garage48.org/events/ecotechhackathon</a>
- 2.3 The Hackathon will be held in English.
- 2.4 Participants are provided background information on NBS pilots, teambuilding activities, and Mentor support during the hackathon.
- 2.5 Participation in the Hackathon is free.
- 2.6 The hackathon is public, and information about it will be posted on the Hackathon website and the websites of cooperation partners, and social networks such as facebook.com and LinkedIn.
- 2.7 The event organisers have the right to publish information about the solutions developed during the hackathon, with reference to their authors.
- 2.8 Copyright and ownership of the solutions developed during the Hackathon belong to their Authors. Hackathon participants undertake to respect the Copyrights of third parties.
- 2.9 By participating in the hackathon, participants agree to share images taken by the Organisers, the Partners or its contractors without receiving compensation. Participants agree that the images and footage may be broadcasted, displayed, reproduced, edited, exhibited, used and

distributed by the Organisers or partners for promotional purposes. This authorisation includes the use of participants name, image and voice. The participant may opt out of one's image being used by notifying the Organisers.

## 3. Requirements for applicants and application procedure

- 3.1 The event is for anyone of legal age (at least 18 years old) and interested in the event's theme.
- 3.2 Participants can complete individual application forms until September 11 2024 at 23:59 online <a href="https://garage48.org/events/ecotechhackathon">https://garage48.org/events/ecotechhackathon</a>. The Organisers can change the application deadline by publishing information about it on the Hackathon platform.
- 3.3 By applying for participation in the Hackathon, the applicant and related persons agree to the processing of personal data and confirm that they are familiar with the Rules of the Hackathon.
- 3.4 The event participants must comply with all the epidemiological requirements established in the country at the time of the event if such are determined.
- 3.5 The Event Organizers have the authority to assess and determine whether participants can participate in the hackathon.

## 4. Application of teams and implementation of ideas

- 4.1 Participation in the Hackathon is possible only as part of one team. Team building activities will be organised during the Hackathon pre-event.
- 4.2 The minimum number of participants in a team is three people and maximum is six.

# 5. Hackathon prizes

- 5.1 The best teams of the Hackathon will receive a one-time cash prize for an awarded place (from now on the Prize).
- For the team to qualify for the Prize Fund, at least one team representative must attend the opening event of the Hackathon, attend all checkpoints, and present the team's results to the Hackathon jury.
- 5.3 The total Prize fund of the Hackathon is 5000 EUR (five thousand euros), which is awarded in the following order: 2000 EUR divided between the members of the 1st place winning team, 1500 EUR divided between the 2nd place winning team, 750 EUR divided between the team members tied for 3<sup>rd</sup> and 4<sup>th</sup> place, 750 EUR divided between the team members tied for 3<sup>rd</sup> and 4<sup>th</sup> place.
- 5.4 Income tax (20%) is deducted from the prize amount and declared by the accounting office of Tallinn University of Technology.
- 5.5 The prize is paid only to those team members who comply with Article 3.1 of this regulation.
- 5.6 To receive prize payouts, the participants must provide personal information: name, surname, personal identification number, address, country of residence, and bank account number.
- 5.7 The prize will be paid out within 25 working days after the announcement of the results.

## 6. Hackathon evaluation Jury panel

- 6.1 The Jury panel consists of:
- Martin Verrey, Tallinn University of Technology
- Jurijs Kondratenko, Riga Technical University
- Joao Rei, elD Easy
- Mari Hanikat, Garage48.

- 6.2 The organisers have the right to invite up to two additional Jury panel members.
- 6.3 The Jury panel makes decisions based scoring the teams for four judging criteria.
- 6.4 The Jury panel evaluates the applicant's compliance with the mentioned requirements of these Rules and decides on awarding the prize to each team of the awarded place.

#### 7. Evaluation

- 7.1 The expected result of the Hackathon is solutions or innovative products which correspond to one or more themes of the Hackathon.
- 7.2 The teams will be judged by the quality of the prototype, team composition, problem-solution fit, feasibility to implement the prototype after the end of the hackathon and impact. The Jury panel members evaluate the teams individually in a 10-point system, where 1 is the lowest, and 10 is the highest, according to the criteria listed in Appendix 1.
- 7.3 The Jury panel decides on the winning teams by open voting, with a majority of votes. If the votes are equally divided, the vote of the President of the Jury panel is decisive.
- 7.4 The jury panel can ask the Organizers and Mentors for their opinions about the team's performance. The evaluation of organisers and mentors is only recommendatory.
- 7.5 The Jury panel's decision is final and cannot be appealed.
- 7.6 The Jury panel's decision is recorded and confirmed by the representative of the Organizers.
- 7.7 The organisers publicly announce the results of the Hackathon during the event award ceremony.

## Appendix 1

Criteria for evaluating teams at "EcoTech Hackathon 2024".

## **Criteria for evaluating teams:**

Criterion	Evaluations system – point scale(1-10)
How likely is that the project will continue after	
the event is over. Is there a clear roadmap of	
actions in place?	
Prototype. How mature is the prototype?	
(mockup of the website or an app, actual	
website, any algorithms etc)	
Impact/ Real change. How big is the impact of	
the solution (one time impact, growing over	
time). In what ways and how much it affects	
the beneficiaries/users	
Validation. Did the team validate the prototype	
with potential users? Is it useful to the	
potential users?	